

In the Claims:

Please amend claims 1, 10, 14-22 and 25 and withdraw claims 11-13 and 23-24 without prejudice as shown in the following claim listing.

1. (Currently amended) A fluid oxygenating apparatus comprising:
 - a housing, the housing comprising a fluid inlet and a fluid outlet;
 - a core positioned within the housing, the core including a ~~channel~~ manifold formed therein, wherein the ~~channel~~ manifold includes an inlet at the bottom end of the manifold in fluid communication with the fluid inlet and an outlet at the top end of the manifold in fluid communication with the fluid outlet;
 - a fiber bundle positioned around ~~on~~ the core, the fiber bundle disposed between the outlet end of the ~~channel~~ manifold and the fluid outlet; and
 - a bubble release, the bubble release disposed between the outlet end of the manifold and the fiber bundle, the bubble release in fluid communication with the outlet end of the ~~channel~~ manifold, wherein fluid is flowed through the fluid inlet, into the ~~channel~~ manifold at the inlet end, through the ~~channel~~ manifold and out the outlet end of the manifold, through the fiber bundle and out the fluid outlet, and bubbles are released through the bubble release port prior to passing through the fiber bundle.
2. (Previously presented) The apparatus of claim 1 wherein the housing includes a body portion and a cap portion, the bubble release port formed in the cap portion.
3. (Previously presented) The apparatus of claim 2 wherein the cap portion is a separate member attached to the body portion.
4. (Previously presented) The apparatus of claim 1 wherein the fiber bundle further comprises a plurality of fibers positioned in the housing and surrounding the core.

5. (Previously presented) The apparatus of claim 4 wherein the fibers are coated with a biocompatible coating.
6. (Previously presented) The apparatus of claim 5 wherein the biocompatible coating prevents the passage of bubbles through the fibers.
7. (Previously presented) The apparatus of claim 4 further comprising a first potting element adjacent a first end of the fibers.
8. (Previously presented) The apparatus of claim 7 further comprising a second potting element adjacent a second end of the fibers.
9. (Previously presented) The apparatus of claim 8 wherein the housing includes a body portion and a cap portion, the bubble release port formed in the cap portion and the cap portion attached to the first potting means via a mating feature.
10. (Currently amended) The apparatus of claim 1 further comprising a heat exchanger operatively connected with the inlet end of the ~~channel~~ manifold, the heat exchanger including an inlet port to receive the fluid into the heat exchanger.
11. (Withdrawn)
12. (Withdrawn)
13. (Withdrawn)

14 (Currently amended) The apparatus of claim 1 wherein the bubble release port has a first end communicating with the outlet end of the ~~channel~~ manifold and a second end, further comprising:

a dome-like structure at the first end.

15. (Currently amended) The apparatus of claim 1 wherein the bubble release port has a first end communicating with the outlet end of the ~~channel~~ manifold and a second end, further comprising:

a toroidal structure at the first end.

16. (Currently amended) The apparatus of claim 1 wherein the bubble release port has a first end communicating with the outlet end of the ~~channel~~ manifold and a second end, further comprising:

a helical structure at the first end.

17. (Currently amended) A method of debubbling a fluid oxygenating apparatus comprising:

providing a housing defining a chamber, a core positioned within and operatively attached to the housing, the core including a manifold formed therein, the manifold having an inlet at a bottom end and an outlet at a top end, a fiber bundle positioned around the core ~~the chamber having a channel with an inlet end and an outlet end and a bubble release port positioned between the fiber bundle and the outlet end of the manifold~~ and communicating with the outlet end of the channel manifold;

flowing fluid through the inlet end of the channel manifold and through the outlet of the manifold and through the fiber bundle and through an outlet in the housing;

collecting bubbles from the fluid adjacent the outlet end of the channel manifold prior to the fluid flowing through the fiber bundle;

releasing the collected bubbles through the bubble release port; and

oxygenating the fluid while flowing through the fiber bundle.

18. (Currently amended) The method of claim 17 further comprising:

flowing the debubbled fluid through a plurality of fibers;

oxygenating the fluid as it passes through the fibers; and

flowing the fluid out a fluid outlet formed in the housing.

19. (Currently amended) The method of claim 17 further comprising:

accumulating bubbles in a dome portion adjacent the outlet end of the channel core.

20. (Currently amended) The method of claim 17 further comprising:
accumulating bubbles in a helical portion adjacent the outlet ~~end~~ of the ~~channel~~
core.
21. (Currently amended) The method of claim 17 further comprising:
accumulating bubbles in a toroidal portion adjacent the outlet ~~end~~ of the ~~channel~~
core.
22. (Currently amended) The method of claim 17 further comprising:
providing a heat exchanger operatively connected with the ~~channel~~ inlet of the
manifold, and flowing fluid through the heat exchanger.
23. (Withdrawn)
24. (Withdrawn)

25. (Currently amended) A fluid oxygenating apparatus comprising:
- a housing defining a chamber;
 - a core positioned within and operatively attached to the housing, the core including a manifold formed therein, the manifold having an inlet at a bottom end and an outlet at a top end;
 - a fiber bundle positioned around the core; and
 - a bubble release port positioned between the fiber bundle and the a top end of the manifold; wherein fluid is flowed through the inlet of the manifold and out the outlet of the manifold and through the fiber bundle and through an outlet in the housing while bubbles are released through the bubble release port prior to flowing through the fiber bundle.